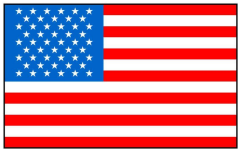


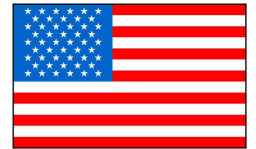
# SCLSIS DATABASE AUDIT

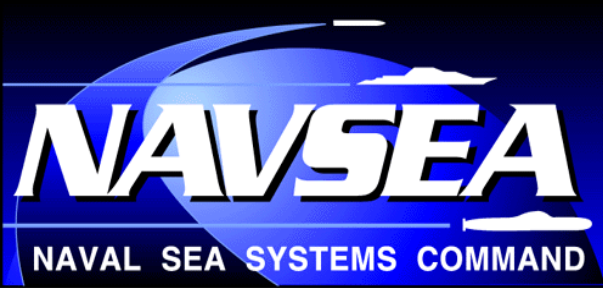
## Validation Working Group

15 APR 03



Tom Ponko, A2Z, Inc.  
SCLSIS Audit Team

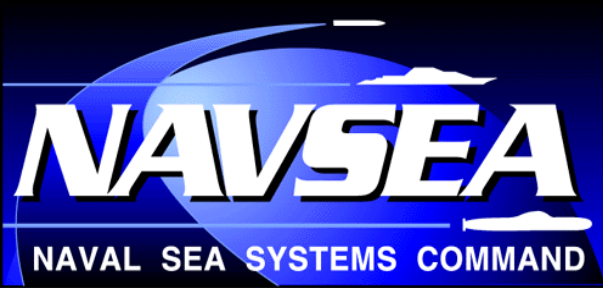




# SCLISIS Database Audit

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- Purpose
- Update
- Schedule
- Process
- Lessons Learned
  - Process
  - Tools
  - Scheduling
  - Database
- Summary



# Purpose

- Answers the Mail.
  - FM-ESC Concerns.
- Quantifies overall health of ship configuration accuracy.
- Provides method for trending configuration accuracy.
- Statistically Valid.....defendable data.
- Baseline for Process Improvement..
- Additional data point for subsequent focused validation efforts.



# Update

- Team established at FTSC LANT Nov 02.
  - Team Training Nov 02 – Jan 03.
  - NSLC observed and certified process.
- First Audit (LSD-44) aborted due to short fused operational requirement.
  - Utilized available time onboard to refine/proof process.
- Audits focused on Norfolk ships.
- Completed audits on 3 DDGs, an FFG, and a LSD.
- Team scheduled thru Jun 03.
- Team ready to audit in other east coast homeports as funding becomes available.



# Schedule

- 14 – 21Apr03 USS Vella Gulf CG-72
- 28 Apr – 05May03 USS Bulkeley DDG-84
- 12 – 19May03 USS Leyte Gulf CG-55
- 26May – 02Jun03 USS Whidbey Island LSD-41
- 09 – 16Jun03 USS Trenton LPD-14
- 23 – 30Jun03 USS Winston Churchill DDG-81
  - USS George Washington CVN-73 postponed.
  - PEO Ships requests LHD-7 Audit.
  - MCM/MHC requested.
  - Schedule SSN Audit.



# Process

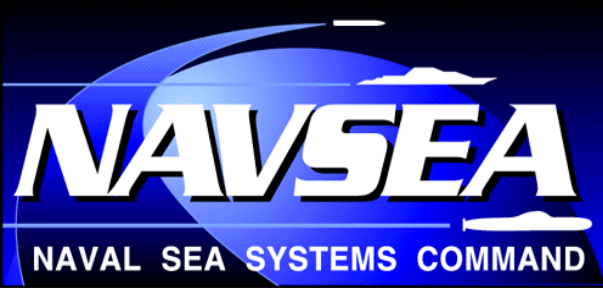
- Developed by Validation Working Group.
- Statistically Valid Random Sample.
  - Sample Size determined:
  - 95% Confidence Level that reality is within +/- 3% of results.
- 50% Record to equipment (Order of selection).
- 50% Equipment to record. (Immediate left)
- Sight verification of installed equipment and associated up-line reporting.
- CDM participation.
- Preliminary Report to CDM/Ship upon completion.
- Root Cause Analysis for process improvement efforts.
- Final Report to SPM/TYCOM after Root Cause Analysis complete.



# Lessons Learned

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- Tools
- Process
- Scheduling
- Database



# Lessons Learned

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## Tools

- Training team on utilization of Convertible laptops as TOMCAT pen pads and research tools prior to full-scale implementation..
  - Experimenting with various power saving methods
- Utilizing TOMCAT Version 4.5 Beta 3
- TOMCAT Changes Requested:
  - Ability to assign records by order of selection.
  - Ability to submit corrective action without impacting audit score.
  - Ability to select Type 4 records as audit candidates.



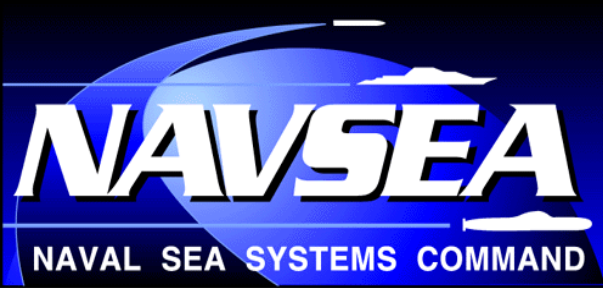


# Lessons Learned

## Process

- Process is sound
  - Continue manual workarounds until TOMCAT changes complete.
- Candidate Selection
  - Doubling required “Record to Equipment” candidates appears sufficient
  - Consider implementing filters

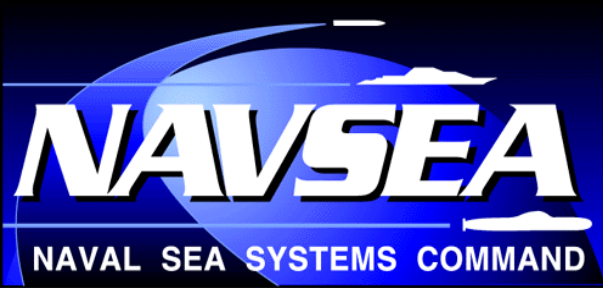
Hull Type	“Equipment to Record” Selection is an issue				LSD
Required Sample	782	782	782	764	780
Audited	801	883	907	880	796
Deferral Rate	42.63%	40.03%	40.42%	41.95%	46.36%
Not to immediate left	12%	9%	14.5%	13.4%	21.5%



# Lessons Learned

## Scheduling

- Considerations
  - Conduct immediately prior to SVT effort
  - Conduct in conjunction with C5RA/HMRA
- Op-sked changes mandated “Target of Opportunity” in some cases.
- Utilizing DFILS schedule.
- Short fuse sked change options:
  - Cancel Audit
  - Identify replacement ship
  - Augment SVT
  - Address S/F issues
  - Audit shore site



# Lessons Learned

## Database

- Database location info major impact on audit effort
- Number of records with QTY > 1
- Number of records with validation dates
- X-RICs

Hull Type	DDG	DDG	DDG	FFG	LSD	CG
Total Records	32110	31125	31852	16877	32406	27030
QTY > 1	.36%	.5%	.37%	8.34%	8.75%	2.03%
XRICs	3.83%	3.96%	4.15%	6.95%	5.51%	4.37%
Blank Location	0	.21%	0	.36%	0	0
Non-specific location	2.6%	1.86%	4.44%	5.42%	1.49%	3.03%
Validation Date	9.42%	6.21%	11.18%	13.98%	15.27%	23.59%
VSAC "V" and "S"	18.89%	37.18%	11.7%	28.97%	27.1%	23.84%



# Summary

- Ship's Force and CDM extremely cooperative.
- Process works and data is defensible.
- Issues:
  - TOMCAT programming changes.
  - "Equipment to Record" candidate selection.
  - Candidate selection filters.
  - Short- fused schedule changes.
  - Database desktop audits
  - Validation Date Population for VSAC "S"
  - Utilization of audit data in subsequent SSVA effort